### ENVIRONMENTAL

# Fact Sheet



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## Pressure-Treated Wood Can It be Used in New Hampshire's Waters?

#### **Concerns over health and environmental effects**

There is a growing concern about the use of pressure-treated wood in lakes and ponds. Creosote, pentachlorophenol, and inorganic arsenicals are the most common preservatives used to extend the life of wood by protecting it from damage by insects, fungi, water and weather. High concentrations of these wood preservatives have been determined to have the capability to cause birth defects, tumors or cancer.

Both inorganic arsenicals and pentachlorophenol are known to accumulate in the tissues of animals, yet creosols do not appear to accumulate in fish or meat. Exposure of fish to wood treatment solutions can rapidly cause harmful effects and death to fish at concentrations below 0.1 ppm. Though there is no evidence that sufficient amounts of these pesticides leach enough from docks to cause aquatic toxicity, the potential nevertheless exists.

The U.S. Environmental Protection Agency along with the U.S. Department of Human Services recommends that "treated wood should not be used where it may come in direct or indirect contact with public drinking water, except for uses involving incidental contact such as docks and bridges." However, DES advises against using pressure treated wood in any waters of the state. Any application for a dock construction permit where creosote-treated wood is used will not be accepted.

#### **Alternatives**

Acceptable alternatives are available. Cypress wood is naturally resistant to decay, although it is difficult to get in this part of the country. CCA Type C (according to AWPA standards) is wood treated with chromated copper arsenic (CCA) in which the chemical composition is formed by the drying process, making it insoluble in water. This is preferable over creosote, pentachlorophenol and inorganic arsenicals, because all of these dissolve in water. Wood-polymer composites made of 100 percent, recycled wood and plastic are environmentally friendly and may outlast other dock products. Another solution would be to use stainless steel pipes for the part of the dock that has direct contact with the lake or pond.

If no alternative is possible, it is recommended to apply two coats of an appropriate sealer (urethane, epoxy, or shellac) to the wood. Apply the sealer away from the lake and allow time for the sealer to dry completely before the dock is installed.

#### **Disposal**

Dispose of pressure-treated wood in landfills. Treated wood should NEVER be burned because of toxic chemicals produced as part of the smoke and ashes.